

**Version of Amended Claims With Markings to Show Changes Made:**

4. (Amended) An isolated nucleic acid molecule consisting of a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence that encodes a polypeptide having an amino acid sequence comprising [shown in] SEQ ID NO:2;

[(b) a nucleotide sequence that encodes of an allelic variant of an amino acid sequence shown in SEQ ID NO:2, wherein said nucleotide sequence hybridizes under stringent conditions to the opposite strand of a nucleic acid molecule shown in SEQ ID NOS:1 or 3;

(c) a nucleotide sequence that encodes an ortholog of an amino acid sequence shown in SEQ ID NO:2, wherein said nucleotide sequence hybridizes under stringent conditions to the opposite strand of a nucleic acid molecule shown in SEQ ID NOS:1 or 3;

(d) a nucleotide sequence that encodes a fragment of an amino acid sequence shown in SEQ ID NO:2, wherein said fragment comprises at least 10 contiguous amino acids; and]

(b) a nucleotide sequence that encodes a polypeptide having an amino acid sequence comprising SEQ ID NO:2, except that residue 281 of SEQ ID NO:2 is isoleucine;

(c) a nucleotide sequence consisting of SEQ ID NO:1;

(d) a nucleotide sequence consisting of SEQ ID NO:1, except that nucleotide 841 of SEQ ID NO:1 is adenine;

(e) a nucleotide sequence consisting of SEQ ID NO:3;

(f) a nucleotide sequence consisting of SEQ ID NO:3, except that nucleotide 47666 of SEQ ID NO:3 is adenine; and

(g) [(e)] a nucleotide sequence that is [the complement of] completely complementary to a nucleotide sequence of (a)-[(d)](f).

8. (Amended) A [nucleic acid] vector comprising the [a] nucleic acid molecule of claim [5] 4.

**REMARKS**

By way of the above amendments, claims 1-3, 5-7, and 10-23 have been canceled as being redundant or being directed to non-elected subject matter; claims 4 and 8 have been amended; and claims 24-37 have been added. As such, claims 4, 8-9 and 24-37 are presently pending.

Support for the amendments to the claims and the newly added claims can be found at least in the old claims and in Figures 1-3. In particular, support for the polymorphisms cited in amended claim 4 and new claim 31 can be found at, for example, FIGURE 3AA. The amendments to the claims and the newly added claims add no new subject matter and their entry is respectfully requested.

Applicants respectfully assert that the claims are in condition for examination on the merits.

Respectfully submitted,

CELERA GENOMICS

By: 

Justin D. Karjala

Reg. No. 43,704

Date: August 12, 2003

Celera Genomics Corporation  
45 West Gude Drive, C2-4#20  
Rockville, MD 20850  
Tel: 240-453-3812  
Fax: 240-453-3084